# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 94-095 NPDES PERMIT NO. CA0005363

WASTE DISCHARGE REQUIREMENTS FOR:

RMC LONESTAR SUNOL PLANT 6527 CALAVERAS ROAD SUNOL. ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

- 1. RMC Lonestar, hereinafter called the discharger, by application dated May 29, 1986, submitted a Report of Waste Discharge for issuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).
- 2. The discharger harvests and processes sand and gravel, and intermittently discharges decanted washwaters and rising groundwater to the Alameda Creek. Groundwater from quarry pits is used to wash clays from the aggregates being processed. Wastewater consisting of sand and gravel wash water and rising groundwater leaves the plant and enters a series of three settling ponds where fine particulate matter and turbidity is removed. The clarified wastewater is then allowed to recharge into the aquifer from the final pond. Excess water that accumulates in the settling ponds is discharged as follows:

POINT	AVERAGE DISCHARGE RATE (mgd)	MAXIMUM DISCHARGE RATE (mgd)	DISCHARGE LOCATION
001	14.4	21.6	Alameda Creek; Lat. 37° 34' 30" Long. 121° 52' 16"
002	14.4	21.6	Alameda Creek; Lat. 37° 34' 9" Long. 121° 52' 10"
003	14.4	21.6	Alameda Creek; Lat. 37° 33' 53" Long. 121° 52' 0"

- 3. Discharge points 001, 002, or 003 will only be activated in the event of excess storm or groundwater. Wastewater will be discharged from only one of the three discharge points (001, 002, and 003) in the event of an increase in precipitation and rising groundwater.
- 4. Sewage wastes are disposed of to an onsite septic system.
- 5. The Board adopted a revised Water Quality Control Plan for the San Francisco Basin (Basin Plan) on December 17, 1986. The Board amended its Basin Plan on September 16, 1992, and the State Board approved it on April 27, 1993, with approval from Office of Administrative Law pending. The Board amended the Basin Plan on October 21, 1992 to adopt a site-specific water quality objective of 4.9 μg/l for copper for San Francisco Bay. The State Board has not approved the Basin Plan amendment of October 1992 as of the date of this permit. The Basin Plan identifies beneficial uses and water quality objectives for surface waters in the region, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses. This Order implements the plans, policies and provisions of the Board's Basin Plan.
- 6. The Beneficial uses identified in the Basin Plan for Alameda Creek and contiguous water bodies are as follows:
  - Water Contact Recreation
  - Non-contact Water Recreation
  - O Wildlife Habitat
  - Warm Fresh Water Habitat
  - O Cold Fresh Water Habitat
  - Fish Migration
  - Fish Spawning
  - O Groundwater Recharge
  - Agricultural Supply
- 7. The Basin Plan sets surface water quality objectives for the Alameda Creek watershed above Niles:

Total Dissolved Solids (TDS): 250 mg/l 90 day - arithmetic mean

360 mg/l 90 day - 90th percentile

500 mg/l daily maximum

Chlorides: 60 mg/l 90 day - arithmetic mean

100 mg/l 90 day - 90th percentile

250 mg/l daily maximum

8. The Basin Plan prohibits discharge to Alameda Creek, including its tributaries, during the dry weather period (May 1 through October 31 of each year). The Board may allow exceptions to the dry weather discharge prohibition when the Board finds that the discharge does not contain characteristics of concern to beneficial uses in Alameda

Creek. The following information supports an exception to the Basin Plan's dry weather discharge prohibition:

- a. The discharge contains no sewage-bearing wastes nor process waste added by the discharger's operations which are considered characteristics of concern to beneficial uses to Alameda Creek when no natural flow occurs.
- b. Alameda County Water District (ACWD) has previously accepted the discharger's effluent limits and discharge conditions for temporary dry weather discharge from quarry operations as not threatening ACWD's downstream domestic water supply.
- 9. Federal Regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 19, 1990. The regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activity (industrial storm water) to obtain a NPDES permit and to implement Best Available Technology Economically Available (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial stormwater discharges.

The stormwater flows from within the facility boundary are directed to the settling ponds. These stormwater flows constitute all industrial storm water at these facilities and consequently this permit regulates all industrial storm water discharges at this facility

- 10. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.
- 11. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.
- 12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

## A. DISCHARGE PROHIBITIONS

1. The treatment, reuse, or disposal of wastewaters shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

- 2. The bypass or overflow of untreated or partially treated wastewater to waters of the State is prohibited.
- 3. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses.
- 4. Discharges of water, materials, or wastes other than storm water, which are not otherwise authorized by this NPDES permit, to a storm drain system, settling ponds, or waters of the State are prohibited.
- 5. Storm water discharges shall not cause pollution, contamination, or nuisance.

#### **B. EFFLUENT LIMITATIONS**

1. Effluent discharged shall not exceed the following limits:

	Constituents	Daily Average	Monthly Average	Annual Average
a.	Total Dissolved Solids (mg/l)	550		500
b.	Turbidity (NTU)	40		*** ****
c.	Total Settleable Solids (ml/l-hr.)	0.2	0.1	

2. The pH of the discharge shall not be less than 6.5 nor greater than 8.5.

## C. RECEIVING WATER LIMITATIONS

- 1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place at levels that cause nuisance or adversely affect beneficial uses:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic

biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

- 2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State anyone place within one foot of the water surface:
  - a. Dissolved Oxygen

5.0 mg/l, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

b. Dissolved Sulfide

0.1 mg/l, maximum

c. pH

Variation from normal ambient pH by more than 0.5 pH units.

d. No increase in turbidity above present natural background levels in Alameda Creek by more than following:

Alameda Creek Background 50 units (NTU) 50 - 100 units 100 units Incremental Increase
5 units, maximum
10 units, maximum
10% of background, maximum

3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

#### D. PROVISIONS

1. Where concentration limitations in mg/l or  $\mu$ g/l are contained in this Permit, the following Mass Emission Limitations shall also apply.

(Mass Emission Limit in kg/day = (Concentration Limit in mg/l) x (Actual Flow in million gallons per day averaged over the time interval to which the limit applies) x = 3.785 (conversion factor).

2. The discharger shall comply with all sections of this Order immediately upon adoption.

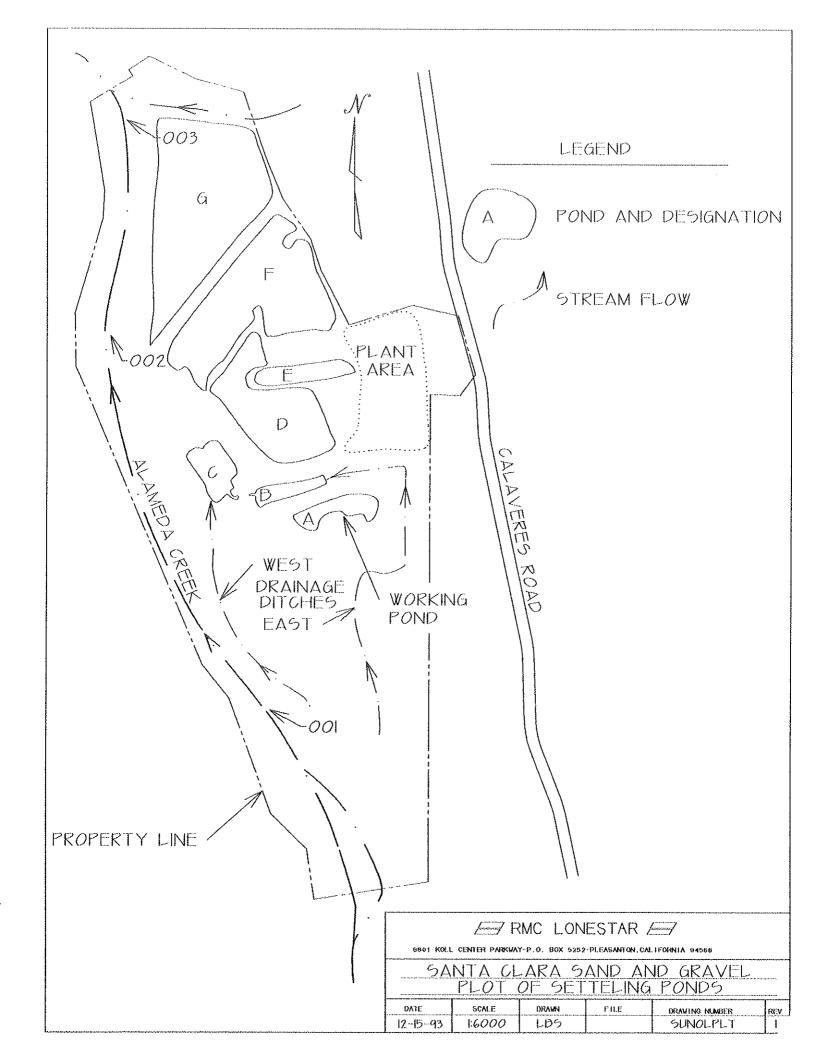
- 3. The discharger shall comply with the **Self-Monitoring Program** for this order, as adopted by the Board and as may be amended by the Executive Officer.
- 4. The discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements" dated August 1993, or any amendments thereafter.
- 5. Wastes from production and processing operations including storm runoff from areas used for loading or washing trucks, shall either be contained on site or routed into sand and gravel wash water settling ponds.
- 6. The discharger shall provide the ACWD notice at least 24 hours prior to start-ups and planned shut-downs of discharge to surface streams.
- 7. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharge(s) governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- 8. This Order expires on August 17, 1999. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days before this expiration date as application for reissuance of waste discharge requirements.
- This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 17, 1994.

STEVEN R. RITCHIE
Executive Officer

## Attachments:

Location Map Self-Monitoring Program Standard Provisions and Reporting Requirements - August 1993



# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR RMC LONESTAR, SUNOL PLANT SUNOL, ALAMEDA COUNTY

NPDES NO. CA0005363

ORDER NO. 94-095

CONSISTING OF PART A, DATED AUGUST 1993 AND PART B

#### PART B

#### I. DESCRIPTION OF SAMPLING STATIONS

#### A. EFFLUENT

<u>Station</u>	Description
E-1	At any point in the outfall between the point of discharge to Alameda Creek (001) and the point at which all waste tributary to that outfall is present.
E-2	At any point in the outfall between the point of discharge to Alameda Creek (002) and the point at which all waste tributary to that outfall is present.
E-3	At any point in the outfall between the point of discharge to Alameda Creek (003) and the point at which all waste tributary to that outfall is present.

## B. RECEIVING WATERS (ALAMEDA CREEK)

Station	<u>Description</u>
C-1	At a point in Alameda Creek located 50 feet upstream from active discharge point.
C-2	At a point in Alameda Creek located 50 feet downstream from active discharge point.

## II. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

- A. The schedule of sampling, analysis and observation shall be that given in Table 1.
- B. A map showing the location and identity of each station sampled shall be submitted with each monitoring report.

# III. REPORTING REQUIREMENTS

- 1. <u>General Reporting Requirements</u> are described in Section C of this Board's "Standard Provisions and Reporting Requirements", dated August 1993.
- 2. <u>Self-Monitoring Reports for each calendar month</u> shall be submitted monthly, by the fifteenth day of the following month. The required contents of these reports are described in Section F.4. of Part A. Section F.4. of Part A (dated August

1993) is modified to include the following: " If no discharge occurred during the monthly reporting period, a letter certifying this shall be submitted to the Regional Board. The letter may be submitted quarterly after the facility has not discharged for at least one year."

- 3. An <u>Annual Report</u> for each calendar year shall be submitted to the Board by February 15th of the following year. The required contents of the annual report are described in Section G.5. of Part A.
- 4. Any <u>overflow</u>, <u>bypass or significant non-compliance incident</u> that may endanger health or the environment shall be reported according to the Sections F.1 and G.2 of Part A.
- I, Steven R. Ritchie, Executive Officer, hereby certify that this Self-Monitoring Program:
- 1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 94-095.
- 2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be authorized by the Executive Officer.
- 3. Is effective on the date shown below.

STEVEN R. RITCHIE Executive Officer

Effective Date: 3/17/94

#### Attachment:

- A. Table 1
- B. Part A (August 1993)

Table 1
Schedule for Sampling, Measurements, and Analysis
RMC Lonestar, Sunol Plant

Sampling Station	E-1,	E-2, I	E-3 <sup>(a)</sup>	C-	1 <sup>(b)</sup>	C-2	)(b)
Type of Sample	C-24	G	О	G	О	G	0
Flow Rate (mgd)	D						
Settleable Matter (ml/l-hr.)		W					
Turbidity (NTU)		W		W		W	
pH (Units)		W		W		W	
Dissolved Oxygen (mg/l & % saturation)		M		M		M	
Temperature (°F)		M		M		M	
Total Dissolved Solids (mg/l & Kg/day)		М		M		M	
Arsenic (μg/l & Kg/day)		Y					
Cadmium (μg/1 & Kg/day)		Y					
Chromium (µg/l & Kg/day)		Y					
Copper (μg/l & Kg/day)		Y					
Lead (μg/l & Kg/day)		Y					
Mercury (μg/l & Kg/day)		Y					
Nickel (μg/l & Kg/day)		Y					
Selenium (μg/l & Kg/Day)		Y					
Silver (μg/l & Kg/day)		Y					
Zinc (µg/l & Kg/day)		Y					
All Applicable Standard Observations			D		D		D

## TYPES OF SAMPLES

#### TYPES OF STATIONS

G = grab sample

C-24 = composite -24-hour

O = observation

E = waste effluent stations C = receiving water samples

# FREQUENCY OF SAMPLING

D = daily when discharging

W = once per week during each week in which discharge occurs
 M = once per month during each month in which discharge occurs

Y = once per year during each year in which discharge occurs

2/Y = twice per year, during each spring (March-May) and fall (September-November) period in which discharge occurs

# TABLE 1 FOOTNOTES

- (a) The "E" stations shall be sampled only when there is a discharge. Each stations shall be sampled separately when it has a discharge. Each sample shall be analyzed separately for all parameters.
- (b) The "C" stations shall be sampled only when a discharge occurs and when there is naturally occurring flow at station C-1.

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